

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594
AIRCRAFT ACCIDENT/INCIDENT REPORT
BRIEF FORMAT
U.S. CIVIL AVIATION

FILE	DATE	LOCATION	AIRCRAFT DATA	INJURIES F S M/N	FLIGHT PURPOSE	PILOT DATA
3-4137	12/19/77	NR. ANCHOR POINT, AK	HILLER ACFT FH1100	CR- 1 0 0	COMMERCIAL	COMMERCIAL, AGE 29, 3313
	TIME - 1828		N18845	PX- 1 0 0	AIR TAXI-PASSG	TOTAL HOURS, 631 IN TYPE,
			DAMAGE-DESTROYED			NOT INSTRUMENT RATED.
	DEPARTURE POINT		INTENDED DESTINATION		LAST ENROUTE STOP	
	HOMER, AK		HOMER, AK		S.S. GREAT LAND	
	TYPE OF ACCIDENT				PHASE OF OPERATION	
	COLLISION WITH GROUND/WATER: UNCONTROLLED				IN FLIGHT: UNCONTROLLED DESCENT	
PROBABLE CAUSE(S)						
PILOT IN COMMAND - IMPROPER IN-FLIGHT DECISIONS OR PLANNING						
PILOT IN COMMAND - CONTINUED VFR FLIGHT INTO ADVERSE WEATHER CONDITIONS						
PILOT IN COMMAND - SPATIAL DISORIENTATION						
FACTOR(S)						
WEATHER - LOW CEILING						
WEATHER - FOG						
WEATHER - SNOW						
WEATHER - ICING CONDITIONS-INCLUDES SLEET, FREEZING RAIN, ETC.						
WEATHER - UNFAVORABLE WIND CONDITIONS						
MISCELLANEOUS ACTS, CONDITIONS - AIRCRAFT CAME TO REST IN WATER						
WEATHER BRIEFING - BRIEFED BY FLIGHT SERVICE PERSONNEL, BY RADIO						
WEATHER FORECAST - FORECAST SUBSTANTIALLY CORRECT						
EMERGENCY CIRCUMSTANCES - UNKNOWN/NOT REPORTED						
ADVERSE/UNFAVORABLE WEATHER						
SKY CONDITION						
OVERCAST						
VISIBILITY AT ACCIDENT SITE						
1/2 MILE OR LESS						
OBSTRUCTIONS TO VISION AT ACCIDENT SITE						
FOG						
WIND DIRECTION-DEGREES						
45						
TYPE OF WEATHER CONDITIONS						
IFR						
REMARKS- HELICOPTER FLOAT EQUIPPED. WINDS GUSTING TO 30 KTS. A/C DAMAGE AND PILOTS INJURY PRESUMED.						

NATIONAL TRANSPORTATION SAFETY BOARD ACCIDENT FILE CONTENTS		PAGE <u>1</u> OF <u>28</u> PAGES		
TRANSPORTATION MODE <input checked="" type="checkbox"/> AVIATION <input type="checkbox"/> HIGHWAY <input type="checkbox"/> PIPELINE <input type="checkbox"/> INTERMODAL <input type="checkbox"/> MARINE <input type="checkbox"/> RAILROAD		NTSB FILE NO. ANC78-F-A005 <i>ef</i>		
IDENTIFICATION OF ACCIDENT 6 Nautical Miles on 220° True Bearing from Anchor Point, Alaska 12-19-77 Fairchild Hiller FH-1100, N18845				
ITEM NO.	DESCRIPTION OF ITEM	NO. OF PAGES		
		DOC.	B&W PHOTO	COLOR PHOTO
1.	Accident File Contents (NTSB Form 6120.3)	1		
2.	Pilot/Operator Aircraft Accident Report (NTSB Form 6120.1)	1		
3.	Factual Aircraft Accident Report (NTSB Form 6120.4)	11		
4.	Letter from U.S. Coast Guard with maps	6		
5.	Statement of Witnesses - 2 each. (NTSB Form 6120.11)	2		
6.	Statement from Air Traffic Control Specialists - 2 each	2		
7.	Chemical & Geological Laboratories of Alaska, Inc., Analytical Report	1		
8.	Release of Aircraft Wreckage and/or Parts (NTSB Form 6120.15)	1		
9.	Photographs	3		6
<div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); font-size: 2em; font-weight: bold;"> 25 3 pgs. Color 3 4135 </div>				
TOTAL NUMBER OF PAGES		28		6

FORM APPROVED - BUDGET BUREAU NO. 04-R5005

REGISTRATION MARK	DATE OF ACCIDENT
N- 18845-	12/19/77

NTSB Form 6120.1 (6-68)

(If additional space is required, attach a supplemental sheet, identify data by Item No.)

9.	If collision accident, complete this item on other aircraft:			
COLLISION ACCIDENT	MAKE AND MODEL	REGISTRATION MARK N-	DAMAGE <input type="checkbox"/> DEMOLISHED <input type="checkbox"/> SUBSTANTIAL <input type="checkbox"/> MINOR <input type="checkbox"/> NONE	
10. WEATHER AT ACCIDENT SITE	SOURCE OF INFORMATION (W.B., witness, etc.)	SKY COVER <input type="checkbox"/> CLEAR <input type="checkbox"/> CEILING AT _____ FT. <input type="checkbox"/> SCATTERED AT _____ FT.		WIND DIRECTION _____
	TURBULENCE (In flight) <input type="checkbox"/> NONE <input type="checkbox"/> MODERATE <input type="checkbox"/> EXTREME <input type="checkbox"/> LIGHT <input type="checkbox"/> SEVERE	LIGHT CONDITIONS <input type="checkbox"/> DAWN/DUSK <input type="checkbox"/> BRIGHT NIGHT <input type="checkbox"/> DAYLIGHT <input type="checkbox"/> DARK NIGHT		VELOCITY _____ KTS., GUSTS _____ KTS.
	WEATHER CONDITIONS AND RESTRICTIONS TO VISIBILITY <input type="checkbox"/> FOG <input type="checkbox"/> SMOKE <input type="checkbox"/> THUNDERSTORM <input type="checkbox"/> SNOW <input type="checkbox"/> FREEZING RAIN <input type="checkbox"/> HAZE <input type="checkbox"/> RAIN <input type="checkbox"/> HAIL <input type="checkbox"/> SLEET <input type="checkbox"/> ICING CONDITIONS		VISIBILITY _____ MILES	ALTITUDE SETTING _____ HG.
	FLIGHT PLAN FILED? <input checked="" type="checkbox"/> YES <input type="checkbox"/> SPECIAL VFR <input type="checkbox"/> NO <input checked="" type="checkbox"/> VFR <input type="checkbox"/> IFR		IF WEATHER WAS INVOLVED, STATE IF WEATHER BRIEFING WAS OBTAINED OR IF WEATHER REPORTS WERE CHECKED AND HOW ACCOMPLISHED UNKNOWN @ THIS TIME	
11. FLIGHT PLAN IN- FORMATION	FUEL ON BOARD AT LAST TAKEOFF	DEPARTURE POINT	TIME OF DEPARTURE	DESTINATION
	6200LBS GRADE	HOMER	6:20	SL. GREENTLAND
OTHER SERVICE, IF ANY, PRIOR TO DEPARTURE NONE				
12. ME- CHANICAL FAILURE/ MAL- FUNCTION	<input type="checkbox"/> YES <input type="checkbox"/> NO (IF "YES," LIST THE NAME OF THE PART, MANUFACTURER, PART NUMBER, SERIAL NUMBER, ETC.) UNKNOWN (NOID SUSPECTED)			TOTAL TIME AT OVERHAUL ON PART
	DESCRIBE WHAT HAPPENED IN CHRONOLOGICAL ORDER, THE CIRCUMSTANCES LEADING TO ACCIDENT AND NATURE OF ACCIDENT. DESCRIBE THE TERRAIN AND INCLUDE A SKETCH OF WRECKAGE DISTRIBUTION IF PERTINENT. ATTACH AN EXTRA SHEET IF MORE SPACE IS NEEDED. STATE POINT AND TIME OF DEPARTURE, INTENDED DESTINATION AND SERVICES OBTAINED.			
13. HISTORY OF FLIGHT				
14. DAMAGE TO AIRCRAFT AND OTHER PROPERTY	DEGREE OF AIRCRAFT DAMAGE <input checked="" type="checkbox"/> DEMOLISHED <input type="checkbox"/> SUBSTANTIAL <input type="checkbox"/> MINOR <input type="checkbox"/> NONE		FIRE <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> INFLIGHT <input type="checkbox"/> ON GROUND <input type="checkbox"/> NONE	
	DESCRIPTION OF DAMAGE TO AIRCRAFT AND OTHER PROPERTY		EST. COST OF REPAIRS \$ 104,000	
15. RECOMMEN- DATIONS (How could this accident have been prevented?)	OPERATOR/OWNER SAFETY RECOMMENDATIONS (Optional entry)			
	NOT KNOWN AT THIS TIME			

I HEREBY CERTIFY that the above information is complete and accurate to the best of my knowledge.

DATE OF THIS REPORT 12/21/77	SIGNATURE OF OPERATOR Donald M. Lee	FOR NTSB USE ONLY	
NTSB ACCIDENT NO. ANC78FA005	REVIEWED BY NTSB OFFICE LOCATED AT ANCHORAGE, AK.	NAME OF INVESTIGATOR JON L. OSGOOD	DATE REPORT RECEIVED 12/21/77

NATIONAL TRANSPORTATION SAFETY BOARD FACTUAL AIRCRAFT ACCIDENT REPORT - GENERAL AVIATION -		NTSB FORM 6120.1 SUBMITTED <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES		N1 ACCIDENT IDENT. NO. ANC78-F-A005 af			
DISTANCE AND DIRECTION FROM NEAREST CITY OR PLACE, STATE 6 Nautical Miles on 220° True Bearing from Anchor Point, Alaska		REGISTRATION MARK N -18845		DATE OF ACCIDENT 12-19-77			
		ELEVATION S.L. MSL	TIME (Local) 1828	TIME ZONE AST			
Part A - WHEN ACCIDENT OCCURRED DURING APPROACH TO OR DEPARTURE FROM AN AIRPORT—COMPLETE FOLLOWING:							
AIRPORT NAME N/A	RUNWAY IN USE <u>N/A</u> DIRECTION: _____ ° MAG. LENGTH: _____ FT.	ON AIRPORT <input type="checkbox"/> OFF AIRPORT <input checked="" type="checkbox"/>	FROM AIRPORT DEGREES: _____ MILES: <u>N/A</u>	RUNWAY SURFACE TYPE: _____ CONDITION: <u>N/A</u>			
Part B - AIRCRAFT DATA							
AIRCRAFT MAKE AND MODEL Fairchild Hiller FH-1100	SERIAL NO. 201	AIRCRAFT TOTAL TIME 2150	DATE LAST ANNUAL OR PROGRESSIVE INSP. 10-15-77	TIME SINCE ANNUAL OR PROGRESSIVE INSP. 74			
ENGINE MAKE AND MODEL Allison 250-C18	ENGINE TOTAL TIME/TIME SINCE O.H. NO. 1 <u>N/O</u> / 930 NO. 2 <u>N/A</u> / <u>N/A</u>			TIME SINCE LAST 100 HOUR INSPECTION 74 hours			
NAME AND ADDRESS OF OWNER OR OPERATOR Totem Helicopters Inc. Box 357 Homer, Alaska 99603			CATEGORY OF AIRWORTHINESS CERTIFICATE Normal				
PURPOSE AND TYPE OF OPERATION (Check all applicable boxes)							
<input type="checkbox"/> LOCAL <input type="checkbox"/> SCHEDULE <input checked="" type="checkbox"/> PASSENGER <input type="checkbox"/> PRACTICE <input checked="" type="checkbox"/> Over water - Shore to ship transfer <input type="checkbox"/> PLEASURE <input type="checkbox"/> MAIL <input type="checkbox"/> BUSINESS <input type="checkbox"/> INSTRUCTIONAL <input checked="" type="checkbox"/> AIR TAXI <input type="checkbox"/> CARGO <input type="checkbox"/> CORP./EXEC. <input type="checkbox"/> AERIAL APPLICATION							
Part C - PILOT-IN-COMMAND DATA							
NAME AND ADDRESS Gary Allen Terry General Delivery Homer, Alaska 99603		SEAT OCCUPIED Front right		PILOT CERTIFICATE NO. 2067231			
		DEGREE OF INJURY Presumed fatal		SOCIAL SECURITY NO. N/O			
		OCCUPATION Professional pilot		NATIONALITY U.S.A.			
<input type="checkbox"/> AIRLINE TRANSPORT <input checked="" type="checkbox"/> AIRPLANE <input checked="" type="checkbox"/> COMMERCIAL <input checked="" type="checkbox"/> HELICOPTER <input type="checkbox"/> FLT. INSTRUCTOR <input checked="" type="checkbox"/> ROTORCRAFT <input type="checkbox"/> PRIVATE <input type="checkbox"/> GYROPLANE <input type="checkbox"/> STUDENT <input type="checkbox"/> GLIDER <input type="checkbox"/> OTHER <input checked="" type="checkbox"/> INSTRUMENT (Airplane) <input type="checkbox"/> MULTI-ENGINE: LAND <input type="checkbox"/> SEA <input type="checkbox"/> <input checked="" type="checkbox"/> SINGLE-ENGINE: LAND <input checked="" type="checkbox"/> SEA <input type="checkbox"/>		TYPE RATINGS OR STUDENT ENDORSEMENTS None		MEDICAL CERTIFICATE			
				DATE OF ISSUE 11-4-77		CLASS TWO	
		AUTOPSY (PILOT MISSING) <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES TOXICOLOGY (PILOT MISSING) <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES		LIMITATIONS/WAIVERS None		DATE OF BIRTH 03-23-1948	
PILOT TIME		LAST 24 HOURS		LAST 90 DAYS		TOTAL TO DATE	
		DUAL	PIC	DUAL	PIC	DUAL	PIC TOTAL
1. THIS MAKE AND MODEL			N/O		150		631
2. NIGHT (All Models)							160
3. DAY (All Models)							3153
4. INSTRUMENTS		ACTUAL				10	
		SIMULATED				127	
SOURCE OF TIME <input type="checkbox"/> PILOT FLIGHT TIME <input checked="" type="checkbox"/> PILOT/OPERATOR EST. <input type="checkbox"/> FAA RECORDS <input checked="" type="checkbox"/> OTHER (Specify)		5. SINGLE ENG. FIXED WING				393	
		6. MULTI-ENG. FIXED WING				4	
		7. GLIDER				0	
		8. ROTORCRAFT				2916	
		9. OTHER:				0	
		TOTAL FLIGHT TIME (5, 6, 7, 8, 9)				3313	

Part D – SECOND PILOT DATA						ANC78-F-A005		
NAME AND ADDRESS			SEAT OCCUPIED		PILOT CERTIFICATE NO.			
			DEGREE OF INJURY		SOCIAL SECURITY NO.			
			OCCUPATION		NATIONALITY			
<input type="checkbox"/> AIRLINE TRANSPORT <input type="checkbox"/> AIRPLANE <input type="checkbox"/> COMMERCIAL <input type="checkbox"/> HELICOPTER <input type="checkbox"/> FLT: INSTRUCTOR <input type="checkbox"/> ROTORCRAFT <input type="checkbox"/> PRIVATE <input type="checkbox"/> GYROPLANE <input type="checkbox"/> STUDENT <input type="checkbox"/> GLIDER <input type="checkbox"/> OTHER <input type="checkbox"/> INSTRUMENT <input type="checkbox"/> MULTI-ENGINE: LAND <input type="checkbox"/> SEA <input type="checkbox"/> <input type="checkbox"/> SINGLE-ENGINE: LAND <input type="checkbox"/> SEA <input type="checkbox"/>			TYPE RATINGS OR STUDENT ENDORSEMENTS		MEDICAL CERTIFICATE			
					DATE OF ISSUE		CLASS	
			AUTOPSY <input type="checkbox"/> NO <input type="checkbox"/> YES		LIMITATIONS/WAIVERS			
			TOXICOLOGY <input type="checkbox"/> NO <input type="checkbox"/> YES					
PILOT TIME			LAST 24 HOURS		LAST 90 DAYS		TOTAL TO DATE	
			DUAL	PIC	DUAL	PIC	DUAL	PIC TOTAL
1. THIS MAKE AND MODEL								
2. NIGHT (All Models)								
3. DAY (All Models)								
4. INSTRUCTIONS			ACTUAL					
			SIMULATED					
SOURCE OF TIME <input type="checkbox"/> PILOT FLIGHT TIME <input type="checkbox"/> PILOT/OPERATOR EST. <input type="checkbox"/> FAA RECORDS <input type="checkbox"/> OTHER (Specify)			5. SINGLE ENG. FIXED WING					
			6. MULTI-ENG. FIXED WING					
			7. GLIDER					
			8. ROTORCRAFT					
			9. OTHER:					
			TOTAL FLIGHT TIME (5, 6, 7, 8, 9)					
Part E – OTHER PERSONNEL								
NAME	ADDRESS (CITY AND STATE)	Other Crew	Pass- enger	Non- occu- pant	DEGREE OF INJURY			
					Fatal	Seri- ous	Minor	None
Jack Hopkins	Seldovia, Alaska		X		X			
IF ADDITIONAL SPACE IS NEEDED – ATTACH SUPPLEMENTAL SHEET								
Part F – IF COLLISION WITH OTHER AIRCRAFT – SUPPLY THE FOLLOWING ON THE OTHER AIRCRAFT								
MAKE AND MODEL	REGISTRATION MARK	DAMAGE						
N/A	N N/A	N/A <input type="checkbox"/> DEMOLISHED <input type="checkbox"/> SUBSTANTIAL <input type="checkbox"/> MINOR <input type="checkbox"/> NONE						

P. - WEATHER AT TIME AND PLACE OF ACCID		ANC78-F-A005	
SOURCE OF INFORMATION Container Ship S.S. Great Land, USCG & Homer FSS		SKY COVER Snow squalls <input type="checkbox"/> CLEAR <input checked="" type="checkbox"/> CEILING Unknown FT. <input type="checkbox"/> OTHER _____ FT.	
TURBULENCE <input checked="" type="checkbox"/> NONE <input type="checkbox"/> LIGHT <input type="checkbox"/> MODERATE <input type="checkbox"/> SEVERE <input type="checkbox"/> EXTREME		LIGHT CONDITIONS <input type="checkbox"/> DAWN / DUSK <input type="checkbox"/> BRIGHT NIGHT <input type="checkbox"/> DAYLIGHT <input checked="" type="checkbox"/> DARK NIGHT	
WEATHER CONDITIONS AND VISIBILITY RESTRICTIONS <input checked="" type="checkbox"/> FOG <input type="checkbox"/> RAIN <input checked="" type="checkbox"/> SNOW <input type="checkbox"/> SLEET <input type="checkbox"/> FREEZING <input type="checkbox"/> THUNDERSTORMS <input type="checkbox"/> HAZE <input type="checkbox"/> HAIL <input type="checkbox"/> SMOKE <input type="checkbox"/> DUST RAIN <input checked="" type="checkbox"/> ICING CONDITIONS		WIND FROM N.E TRUE DIRECTION VELOCITY 25 KTS., GUSTS 30 KTS. LIGHT & VARIABLE <input type="checkbox"/> VISIBILITY Zero to 1/2 MILES ALTITUDE SET. 30.05 HG.	
TEMPERATURE 33° at accident site. 24° at Homer° F		DEW POINT (HOMER) 17 ° F	
Part H - FLIGHT PLAN INFORMATION			
DEPARTURE POINT Homer, Alaska		DATE AND TIME OF DEPARTURE Departed Homer 12-19-77 at 1808 AST	
DESTINATION Container ship GREATLAND		ETA (If any) Unknown	
INTERMEDIATE POINTS OF LANDING None		SERVICE PRIOR TO LAST TAKEOFF Unknown	
FUEL ON BOARD LAST TAKEOFF 62 GALS / LBS. Jet-B GRADE			
FLIGHT PLAN FILED: <input type="checkbox"/> NONE <input checked="" type="checkbox"/> VFR <input type="checkbox"/> IFR <input type="checkbox"/> SPECIAL VFR <input type="checkbox"/> OTHER:			
DESCRIBE WEATHER BRIEFINGS OBTAINED (From whom, when, where and how received) AND ENROUTE WEATHER REPORTS REC'D. Pilot filed VFR flight plan with Homer FSS via aircraft VHF radio and received weather briefing which was: 1700 feet scattered, 2500 overcast, no visibility reported. First report subsequent to accident - Homer - 1700 scattered, estimated 2300 broken, 5000 overcast, visibility 7 miles in light snow. Millibar pressure 1017.9, temperature 26, dewpoint 19, wind 340° at 4 knots, altimeter 30.06. Remarks: Wind on the Homer Spit 060° at 7 knots. Weather report by the S.S. GREAT LAND which was in accident area at time of accident was: Visibility 0 - 1/2 mile in snow and fog, wind N.E. 25 - 30 knots, seas slight. FAA Communications Center reported waves 3 - 5 feet, water temperature 36° F, air temperature 33° F.			
Part I - COMPONENT/SYSTEM FUNCTIONAL FAILURE			
<input type="checkbox"/> NO <input type="checkbox"/> YES (If "Yes", give part name, mfr., part no., serial no., etc.) Unknown - Missing aircraft		TIME ON PART TOTAL SINCE OVERHAUL	
Part J - AIRCRAFT AND GROUND DAMAGE			
DEGREE OF AIRCRAFT DAMAGE PRESUMED <input checked="" type="checkbox"/> DEMOLISHED <input type="checkbox"/> SUBSTANTIAL <input type="checkbox"/> MINOR <input type="checkbox"/> NONE		FIRE <input type="checkbox"/> NO <input type="checkbox"/> IN FLIGHT Unknown <input type="checkbox"/> YES <input type="checkbox"/> ON GROUND	
DESCRIBE GROUND DAMAGE (If any) N/A			

ANC78-F-A005

History of the Flight

Float equipped Fairchild Hiller, FH-1100 helicopter, N18845, is owned and operated by Totem Helicopters, Inc., Box 357, Homer, Alaska, 99603. On December 19, 1977, it was being piloted by Gary Allen Terry on a non-scheduled air taxi flight. The planned route of flight was to be from Homer, to Anchor Point, to the steam ship (S.S) Great Land located in Cook Inlet, and then return to Homer, Alaska.

The helicopter departed Homer at 1808 AST* with the pilot and one passenger on board. The passenger, a marine pilot, was to disembark on the S.S. Great Land which was enroute to Anchorage, Alaska.

Two witnesses observed a helicopter over Anchor Point at approximately 1820 hours flying in heavy snow with poor visibility.

Mrs. Marjorie Klein, who is a secretary for the Kenai Peninsula Borough, saw a helicopter with its landing light on as it passed low over her car at Mile 157 of the Sterling Highway. She stated that she thought the helicopter was trying to find a place to land because the weather was so bad. She continued to observe the helicopter and saw that the landing light went out; the helicopter made a sharp turn towards the bay (to the north-west) and disappeared in the snow and fog. A witness statement from Mrs. Klein is enclosed and included as part of this report.

At approximately the same time, around 1820 hours, Officer Bruce Bayes who is a Judicial Services Officer employed by the Alaska State Troopers observed a helicopter flying low over Anchor Point. Officer Bayes was also driving on the Sterling Highway. He stated that the visibility was so poor due to blowing snow that he had to reduce his automobiles speed and keep his headlights on low beam. With high beams on it was reported there was too much light reflecting off the heavy snowfall creating a blinding effect.

Neither witness could positively identify the helicopter as N-18845.

Captain Harold L. Small, who is the Ship Master of the S.S. Great Land stated that due to encountering poor weather conditions while approaching Anchor Point, he decided to change his ships course from a northerly heading to 120 degrees true in order to run up under land for embarking the marine pilot from the helicopter. The ships original course would have taken it to a point where the helicopter normally rendezvous with the S.S. Great Land which is 4 to 5 miles due west of Anchor Point.

Captain Small advised the helicopter by radio that due to poor weather in the vicinity of Anchor Point he was turning into Kachemak Bay to make the pick up in the "bluff area" about 2/3rds of the way from Anchor Point to Homer. The helicopter pilot then advised Captain Small that he was hovering in the area of Anchor Point. Captain Small suggested to the helicopter pilot that he fly down to and then out from the bluff area to meet up with the ship because the weather was better there. About ten minutes later Captain Small observed the helicopter on the ships radar heading generally toward the ship in a southerly direction. This would place the helicopter out over Cook Inlet.

Captain Small advised the helicopter pilot that he had him on radar. The pilot requested a vector to the ship which Captain Small furnished. The helicopter was

* All times are Alaska Standard Times based on the 24-hour clock.

PART U-NARRATIVE STATEMENT OF PERTINENT FACTS, CONDITIONS, AND CIRCUMSTANCES (Cont'd)

observed drifting westerly from a southerly course. When advised by the S.S. Great Land, that he was drifting off course, the helicopter pilot radioed the ship that his "compass was out". It is not known exactly what the helicopter pilot meant by that transmission or just what the specific problem was. A short time later, the helicopter pilot stated he could not find the ship and asked for a vector back to the beach. Captain Small gave a vector of 080 degrees magnetic.

The next transmission was "MAYDAY" received two times in rapid succession. One MAYDAY was received on the airborne frequency of 123.6, and the other was received on Marine band VHF.

According to Captain Small, shortly after the distress call the helicopter disappeared from the radar screen. Captain Small fixed the helicopters position to be over water on a true bearing of 220 degrees, 6 miles from Anchor Point.

The S. S. Great Land, the U.S. Coast Guard Cutter Sedge, numerous commercial fishing vessels, two Coast Guard C-130 airplanes and one Coast Guard HH3F helicopter were on scene in the search area within a very short time. Helicopter N-18845, could not be found.

Injuries to Persons

The pilot of the helicopter has not been found and he is presumed to have received fatal injuries. The passenger of the helicopter received fatal injuries. The passengers body was found the morning after the accident at 1035 hours by the USCG Cutter Sedge. The body was in a yellow, EAM-5, five man life raft that was carried aboard N-18845. The life raft was located at coordinates 59 38.5N, 152 02.8W and was partially filled with water.

Damage to Aircraft

The aircraft is missing and is presumed to have been destroyed. The only portion of the helicopter that was found was the right pontoon. The USCG Cutter Sedge retrieved the pontoon from the water at coordinates 59 43.1N, 152 03W at 1156 hours the morning after the accident.

Personnel Information

The pilot was born on March 23, 1948, and resided in Homer, Alaska. He held a Commercial Airman Certificate and is rated in airplane single engine land and sea, instrument, and helicopter, rotorcraft. He was not instrument rated in helicopters. He held a current Second Class Medical Certificate dated November 4, 1977, with no limitations.

The last entry in the pilot's log book was September 10, 1977. With additional information from the operator of Totem Helicopters, Inc., it has been determined the pilot had a total of 3,313 hours total flight time, 2,916 of which was in helicopters. Between September 10th and December 19, 1977, the pilot flew 150 hours.

PART U-NARRATIVE STATEMENT OF PERTINENT FACTS, CONDITIONS, AND CIRCUMSTANCES (Cont'd)

The pilot had 631 hours in the FH-1100 helicopter. His log book reflects 10 hours of actual instruments, 127 hours of instrument simulator time and 160 hours of night time.

The pilot had passed a CFR Part 135.138 checkride on March 15, 1977, in the Fairchild Hiller FH-1100 helicopter.

The pilot had been employed by Totem Helicopters since March 1977. Prior to that time he had flown for Sea Airmotive, Inc., out of Anchorage, Alaska.

The pilot's log book indicates he had flown 1,553 hours in helicopters as a U.S. Army Aviator between March 1969, and December 1971.

Aircraft Information

The aircraft has not been recovered; however, an inspection of the aircraft and engine log books indicate that it was being maintained in accordance with current and applicable Federal Aviation Administration (FAA) regulations.

After the accident there was a question raised as to whether or not any radio equipment had been removed from N-18845 for repairs which could be considered contributory or otherwise related to the accident. On the evening of December 23, 1977, this investigator talked by telephone with Mr. Thomas Mayhan, who is employed by South Central Radar in Homer, Alaska. He stated that he had removed the marine band Very High Frequency (VHF) radio from N-18845 previous to the flight on December 19th and further stated that the pilot had checked out the aircraft Automatic Direction Finder (ADF) and Radio Altimeter, and that they were functioning normally. It was also reported that the power pack supplying the A.D.F. was working properly.

The aircraft was equipped with the following emergency equipment:

1. Sharc 7 Emergency Locator Transmitter (ELT) located under the pilot's seat. Maintenance records dated October 11, 1977, indicate ELT battery out of date October 1977.
2. One Eastman Aero Marine (EAM-5) five man life raft equipped with sea anchor, heaving line and raft lanyard; raft light with water-activated batteries; survival kit with signal flares, rations, compass, signal mirror, 2 paddles, gloves, line, bailing bucket, police whistle, inflating pump, and several other items to sustain survival at sea. The life raft canopy was not on board the helicopter. It was reported that the raft light was illuminated and blinking when retrieved from the water; however, it was extremely weak.

PART U-NARRATIVE STATEMENT OF PERTINENT FACTS, CONDITIONS, AND CIRCUMSTANCES (Cont'd)

3. There were enough standard airline type CO2 inflatable vests for each person on board the aircraft. The marine pilot was wearing his own, personal Mae West life vest at the time of the accident.

NOTE: The life raft, survival kit, and four life vests were inspected and repaired as necessary by Eagle Enterprises, Inc., in Anchorage, Alaska, on October 12, 1977. According to the inspection checklist there was no radio beacon on the raft.

Dual controls were not installed in the aircraft. It was equipped with cargo racks on top of the fixed floats and a cargo hook. It was reported the floats were rebuilt by Garrett in 1975, and that they were in excellent condition. The aircraft had an "auto-relite" capability in the event of engine failure (flame-out) which could be caused by excessive snow or precipitation entering the engine. A landing light, fixed at a 45° angle to the aircraft longitudinal axis was installed and reported to be operational. Seat belts were installed in the aircraft. There were no shoulder straps.

The aircraft had the following communication and navigational radios:

1. KY95 VHF transceiver radio.
2. Marine 10-channel, 30 watt, VHF radio. Note: This radio was out of the aircraft for repairs at the time of the accident.
3. Sensitive altimeter.
4. Bonzer Mark 10 radar altimeter with decision height beeper.
5. KR86 ADF.
6. Humphrey Gyro (electric). Note: This gyro received a warranty check three months prior to this accident.
7. Magnetic (stand-by) compass.
8. Turn and Bank Indicator. (Maintenance records indicate the turn and bank to be inoperative.)
9. Rate of Climb Indicator.

The pilot could easily switch from airborne to marine band VHF transmitters by flipping a toggle switch (2-position) on the lower console between the pilot and co-pilot seat.

PART U-NARRATIVE STATEMENT OF PERTINENT FACTS, CONDITIONS, AND CIRCUMSTANCES (Cont'd)

It was reported that the passenger carried a hand held portable marine band VHF radio with transmit, receive capability. This would explain the two "MAYDAY" transmissions, one on the airborne radio; the other on marine band.

The passenger in the left front seat did not have access to a headset nor did he have the capability of transmitting on the aircraft VHF radio. The aircraft VHF receiver was connected to a speaker.

Since it is not known what deficiencies may be pertinent to the accident, below is a list of uncorrected faults up to an aircraft tach time of 66.4 hours. The tach time of 66.4 was given by the operator as the time of the accident.

1. Weight on tail rotor guard missing.
2. Check RPM trim for proper range.
3. Marine VHF weak. (This radio was removed for repairs and not aboard the aircraft.)
4. Rubber on throttle grip slips.
5. Radio altimeter inoperative over snow. (The operator stated that he and the pilot discussed this discrepancy, and it was mutually understood that this problem only occurred over snow covered terrain, not over water.)
6. Turn and Bank inoperative.
7. Heater goes off when switched from low to high.
8. Filter light stays on. (Fuel filter.)

The operator gave this investigator a note which he stated was in the pilot's hand writing that had been found in the operator's daily record. It stated, "Dec 8 ODECO 8:30 P.M. Call AAI for Ocean Ranger - called Tommy (Tommy Craig) Ak. Helicopters - fuel filter light came on in flight - went off on landing. O.K. for now."

This investigator talked to Mr. Craig at Alaska Helicopters on December 23, 1977, and was furnished the following information.

The aircraft is equipped with a dual bypass filter system. The 1st stage airframe filter is a 25 micron filter. The 2nd stage is located inside the airframe filter and it utilizes a 50 micron filter.

PART U-NARRATIVE STATEMENT OF PERTINENT FACTS, CONDITIONS, AND CIRCUMSTANCES (Cont'd)

The airframe fuel filter micro switch and valve was replaced on October 15, 1977. The aircraft total time was 2076.4. A 5 micron filter was installed in the engine fuel pump on September 2, 1977. The aircraft total time was 1976.3.

This type of aircraft is equipped with engine anti-ice utilizing bleed air from the engine. This helicopter does not have any other anti-ice or de-ice capability. It did have a reverse scoop for air entering the engine. This reverse scoop was designed primarily to minimize the possibility of engine flame-out which could be caused by flying through heavy precipitation.

Weight and balance is not considered to be a factor contributing to or being related to this mishap. Besides the passenger in the front seat, the only other items reported to be on the helicopter were the previously mentioned pieces of emergency equipment.

The operator reported that the aircraft had 62 U.S. gallons of Jet-B fuel on board at last takeoff.

Meteorological Information

When the pilot filed a VFR flight plan with Homer FSS via the aircraft VHF radio, he received the following weather: Homer - cloud condition 1,700 feet scattered, 2,500 feet overcast, no visibility reported. The first official weather reported by Homer FSS subsequent to notification of the accident was: Clouds 1,700 scattered, estimated 2,300 broken, 5,000 overcast, visibility 7 miles in light snow, millibar pressure 1017.9, temperature 26, dewpoint 19, wind 340° at 4 knots, altimeter setting 30.06 inches of mercury. Remarks - wind on the Homer Spit 060° magnetic at 7 knots.

Weather reported by the S. S. Great Land in the vicinity of the accident site and at the time of the accident was: Visibility zero to one-half mile in snow and fog, wind out of the northeast at 25 - 30 knots, seas slight. It was reported by the USCG that the wave height at the accident site was 3 to 5 feet, water temperature 36 F and the air temperature was 33°F. Information received from the U.S. Coast Guard HH3F helicopter indicated that they encountered heavy snow and moderate aircraft icing at the accident site. The USCG helicopter from Kodiak, Alaska, was on-scene within 40 minutes of the time of the accident.

When Officer Bruce Bayes of the Alaska State Troopers saw the helicopter over Anchor Point, he stated the weather to be heavy snow, visibility less than one-half mile, with strong winds out of the north.

The light condition was dark night.

PART U-NARRATIVE STATEMENT OF PERTINENT FACTS, CONDITIONS, AND CIRCUMSTANCES (Cont'd)

Aids to Navigation

As mentioned in the witness statement given by Captain Harold L. Small, the S. S. Great Land has the capability of emitting a 410 kilocycle signal which would enable the helicopter pilot to "home" to the vessel with the helicopter ADF. Captain Small stated that after the helicopter was picked up on radar and given a vector, the pilot requested the radio beacon. The Great Land radio operator immediately transmitted the 410 kilocycle signal but the helicopter pilot advised he was not receiving it. The signal was then sent using maximum transmission strength.

The helicopter pilot came back and advised the ship that he was still not receiving the signal. Possibly, this is what the pilot was referring to when he radioed the ship and said, "my compass is out".

Communications

The FSS at Homer received "MAYDAY, MAYDAY Helicopter 845, 6 west Anchor Point" at 1828 AST, and the S.S. Great Land received "two quick MAYDAYS over VHF" (marine band radio) at the same time. This would indicate the pilot transmitted on the airborne VHF, while the passenger transmitted on his hand held portable marine band VHF.

Wreckage and Impact Information

The aircraft is missing. The only portion of N18845 that was recovered was the right pontoon and several small pieces of plexiglass that were caught in a fold of the floats canvas. A metal tube which runs inside a canvas sleeve on top of the float was bent approximately 18°. The bend was near the aft portion of the tube which would indicate the aircraft impacted the water in a relatively nose high attitude. Deformation to the float and metal tube also indicate impact to be relatively level in relation to the roll axis of the helicopter. Impact velocity can not be accurately determined; however, due to the absence of any impact injuries on the passenger, this would indicate impact velocities between minor and moderate. Either the pilot or the passenger was able to inflate the emergency raft and then the passenger was able to get in it.

Medical and Pathological Information

An autopsy and toxicological study was performed on the passenger by Donald R. Rogers, M.D., Pathologist, at the Walsh Mortuary in Kenai, Alaska. There was nothing noted in the autopsy or toxicological screen that could be considered contributory to the accident. The cause of death was diagnosed as drowning due to possible hypothermia. When the life raft was found, there was water inside of it.

ANC78-F-A005

Survival Aspects

Based upon the fact that the passenger had no impact injuries; he was able to exit the helicopter; inflate the life raft, and get into it; this accident must be classified as survivable.

Intense search and rescue efforts began immediately after the distress call was received by two Coast Guard C-130 aircraft. A Coast Guard HH3F helicopter, a Coast Guard Cutter, the S.S. Great Land, and numerous commercial fishing vessels from the Homer and Soldotna area aided in the search.

The only logical reason why the life raft was not spotted on the evening of the accident is because of heavy snow and drastically reduced visibility. Neither Coast Guard C-130 airplane was able to pick up an ELT signal in the vicinity of the accident and was therefore unable to pin-point the helicopters location.

It was reported that the emergency life raft was of such a size that it could easily be carried between the passengers feet on the left side. This is also due to the fact that the dual controls were not installed. It is not known whether this kit was in the front or in the back on this particular flight. The raft had a lanyard which the passenger could have hung on to (its intended purpose) which may have made it easier for the passenger to reach the raft once in the water and then to inflate it.

Based upon the U.S. Coast Guard report which is enclosed and included as part of this report; the life expectancy for a man in the water, given on-scene conditions, was two hours.

Tests and Research

A fuel sample was taken from the fuel tank that N11845 refueled from prior to this flight. It was analyzed at Chemical and Geological Laboratories of Alaska, Inc. in Anchorage, Alaska. Their report indicates the sample met the necessary specifications for Jet-B fuel. That analytical report is enclosed and included as part of this report.

No additional information at this time.

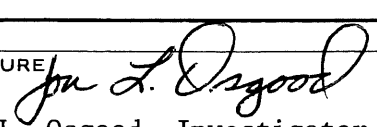
THIS REPORT CONSISTS OF 11 PAGES.

Part V - ADDITIONAL PERSONS PARTICIPATING IN THIS INVESTIGATION

NAME, ADDRESS, AND AFFILIATION

Peter E. Beckner - Principle Operations Inspector, FAA, GADO-1, Anchorage, Alaska

Part W - INVESTIGATED BY

DATE	AGENCY	SIGNATURE
03-28-78	National Transportation Safety Board	 Jon L. Osgood, Investigator



**DEPARTMENT OF TRANSPORTATION
UNITED STATES COAST GUARD**

MAILING ADDRESS:

Commanding Officer
USCG Air Station
Box 33
FPO Seattle 98790

16100
9 February 1978

From: Commanding Officer, USCG Air Station, Kodiak, Alaska
To: Mr. Jon L. Osgood, Air Safety Investigator National
Transportation Safety Board, Anchorage, Alaska
Via: Commander, Seventeenth Coast Guard District (osr)

Subj: Totem Helicopter FH-1100 Crash, information concerning

Ref: (a) NTSB ltr to CGAS Kodiak dtd 28 DEC 77

1. In response to reference (a) the following information has been taken from the case folder on the Anchor Point Totem Helicopter crash (CGK-065) (UNC-047 (MUCN-0027)).

a. COGARD COMMSTA Kodiak recieved initial notification of subject aircraft crash at 191838 local DEC 77 from the M/V Great Land/WNDF via MF CW.

b. The aircraft involved and hours flown on SAR were:

1. HC130 CG 1500 (fixed wing) 1 Sortie 2.0 hrs
2. HC130 CG 1503 (fixed wing) 1 Sortie 2.5 hrs
3. HH3F CG 1493 (Helicopter) 2 Sorties 7.8 hrs

c. Chronological order of aircraft movement (all times local)

1. 191840W HC130 CG 1500 diverted to scene for SAR
2. 191850 CG 1500 arrived on scene
3. 191909 HH3F CG 1493 airborne from Kodiak enroute scene
4. 192008 CG 1493 arrived on scene
5. 192008 CG 1500 dptd scene enroute Elmendorf to refuel
6. 192042 CG 1500 arrived Elmendorf RON
7. 192225 CG 1493 dptd scene enroute Kenai to refuel
8. 192304 CG 1493 arrived Kenai RON
9. 200822 HC130 CG 1503 airborne from Kodiak enroute scene
10. 200845 CG 1493 airborne from Kenai enroute scene
11. 200905 CG 1493 arrived on scene
12. 200917 CG 1503 arrived on scene
13. 201058 CG 1503 dptd scene enroute Kodiak
14. 201119 CG 1493 dptd scene enroute Kodiak
15. 201200 CG 1503 arrived Kodiak area
16. 201232 CG 1493 arrived Kodiak

Subj: Totem Helicopter FH-1100 Crash; information concerning

d. Local Weather for Anchor Point:

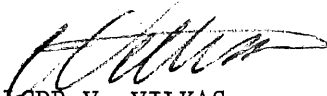
	<u>TIME:</u>	<u>WIND:</u>	<u>SEAS:</u>	<u>TEMP:</u>		<u>VIS:</u>	<u>REMARKS:</u>
				<u>AIR:</u>	<u>SEA:</u>		
(1)	192350W	NE 25-30 kts	3-5 ft	--	--	0- $\frac{1}{4}$ mi	Snow Showers
(2)	200831	NW 12 kts	2-4 ft	33F	36F	$\frac{1}{2}$ mi	Snow Showers
(3)	201017	NNE 21 kts	3-5 ft	31F	42F	$\frac{1}{2}$ mi	Snow Showers
(4)	201235	N 18 kts	2-4 ft	31F	--	1 mi	Snow Showers
(5)	201745	-- 18 kts	2-4 ft	31F	42F	3/4 mi	Snow Showers
(6)	ICING: See Paragraph (g).						

e. Tides/Currents off Anchor Point:

(1)	19 DEC (MON)	0235W	4.4 ft	20 DEC (TUE)	0343W	5.1 ft
		0838	17.2 ft		0934	17.3 ft
		1546	2.8 ft		1649	1.9 ft
		2131	14.3 ft		2240	15.0 ft
(2)	19 DEC	1638W	Slack			
		1926	Flood 1.5 kts	Direction of Flood 000 Degrees True		
		2251	Slack			
	20 DEC	0149	Ebb 1.3 kts	Direction of Ebb 195 Degrees True		
		0435	Slack			
		0744	Flood 1.7 kts			
		1035	Slack			
		1451	Ebb 2.0 kts			
		1712	Slack			

f. Due to an extensive search of debris area conducted by Coast Guard aircraft and surface units, after recovery of liferaft resulted in negative significant findings, the life expectancy for a man in the water given on-scene conditions was two hours, the on-scene weather was not conducive for search, and the low probability of locating further survivors or debris, Coast Guard Air Station Kodiak requested suspension of Case at 201745W DEC 77 pending further developments. Official case suspension permission was given by NORPACSARCOORD Juneau at 201915W DEC 77 pending further developments.

g. Icing conditions at Anchor Point search area described by Coast Guard Helicopter 1493 Aircraft Commander as moderate for HH3F model helicopter but would probably be worse for the Totem helo.


LCDR V. VILKAS
By direction

47

29

Overlaps Mc Grath

TUCKS
#1

11,500
MSL

Overlaps Kodiak

CLAMS

COOK

Flood 191926W DEC 77 152°
HIGH TIDE 192131W DEC 77
1.5 KTS
14.3 FT

DEEP CREEK

See NOTAMS/ALAS FLIP
for CZ eff hr

ENGLISH BAY
27 - 20

5500
MSL

14

INLE

NINILCHIK
270 - 25

KACHEMAK
387 ACE

HOMER
114.6 01 93 HOM

FSS opr 0600-2130
other times contact ENAT FSS

SELDOVIA
29 - 26
00 - S 20

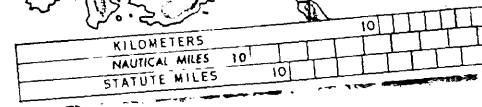
KASITSNA
05 - 08

JAKOLOF BAY
05 - 11

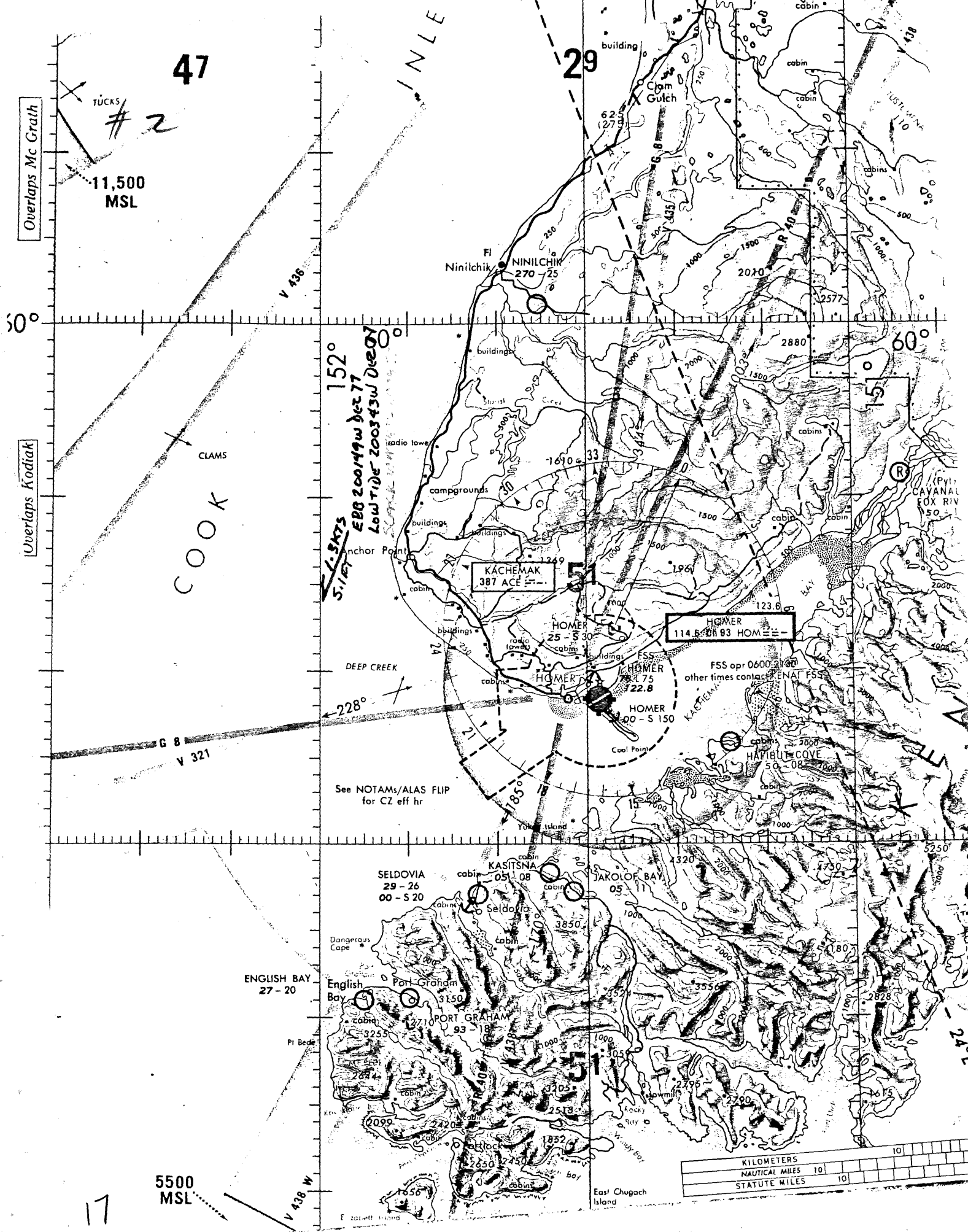
English Bay

PORT GRAHAM
93 - 18

East Chugach Island



16



Overlaps Mc Grath

47

#3

11,500
MSL

CLAMS

COOK

AZ000 200744W Dec 77
MIGHTING 200943W Dec 77

17.3 FT

DEEP CREEK

See NOTAMS/ALAS FLIP
for CZ eff hr

5500
MSL

29

FI
NINILCHIK
270-25

KACHEMAK
387 ACE

HOMER
114.6-08-03 HOMER

SELDOVIA
29-26
00-S 20

ENGLISH BAY
27-20

KASITSNA
05-08

SAKOLOF BAY
05-11

PORT GRAHAM
93-18

KILOMETERS
NAUTICAL MILES 10
STATUTE MILES 10

Overlaps Mc Grath

Overlaps Kodiak

47
#4
TUCKS

11,500
MSL

0°

COOK

66B 20 45 W Dec 77 1527
Low Tide 2016 49 W Dec 77
2.0 KT
1.9 KT

DEEP CREEK

See NOTAMS/ALAS FLIP
for CZ eff hr

5500
MSL

ENGLISH BAY
27-20

SELDOVIA
29-26
00-S 20

PORT GRAHAM
93-18

29

NINILCHIK
270-25

KACHEMAK
387 ACE

HOMER
25-S 30

HOMER
114.6-08 93 HOM

HOMER
78-75
122.8

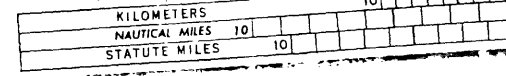
HOMER
140-S 150

HARIBUT COVE
50-08

KASITSNA
05-08

JAKOLOF BAY
05-11

PORT GRAHAM
93-18



NATIONAL TRANSPORTATION SAFETY BOARD

DEPARTMENT OF TRANSPORTATION

WASHINGTON, D.C. 20591

STATEMENT OF WITNESS

The purpose of this statement is intended solely for use in determining the facts, conditions and circumstances, and the probable cause of the subject accident.

Date 23 December, 1977I. Place of accident Anchor Point, Cook I. 1st Date 19 December, 1977 Hour 1830II. Aircraft Tote Helicopter FAA Certificate No. _____III. What is your name Harold L. Small Age 55IV. Address McFarland Shores, New Harbor, Maine 04554V. Occupation Ship Master By whom employed Interocean Management Corp.VI. Where were you at the time of the accident On bridge of S.S. Great Land

VII. Tell in your own words what you saw or heard before and at the time the accident occurred.

At approx 1815 hours on 12-19-77 while approaching Anchor to pick up pilot to Anchorage, I changed vessels course to 120 degrees true to run up under land for embarking pilot from Helicopter, due to heavy snow and NE wind approx 30-35 knots. Shortly thereafter I picked up helicopter bound to vessel from Anchor Point. I confirmed to Helicopter that I had them on radar and gave a magnetic compass vector from their position to vessel, approx 160 mag. Vessel also gave at their request a radio keyed signal for their RDF. Helicopter unable to pick up our signal. Signal strength increased however helicopter unable to receive. Helicopter then noted on radar screen to be drifting off course to the west. I advised helipilot of this situation advising to correct to his left. Helicopter then advised that his compass was out, and requested a vector back over Anchor Point. I gave 080 degrees magnetic but noted that helicopter was continuing approx due west. At 1830 helicopter called out two quick Maydays over VHF. I immediately plotted Helicopters position on radar, range 6.0 miles, bearing 220 degrees out from Anchor Point and brought ship around in a tight turn to the right heading to helicopters position. A few moments later helicopters blip disappeared from the Radar Screen. A VHF message was immediately dispatched to the USCG and to the helicopter base, giving details. Vessel engaged in search through to 0803 hrs., 12-20-77 when relieved by USCG Cutter Sage.

H. L. Small

 (Signature)

NATIONAL TRANSPORTATION SAFETY BOARD

DEPARTMENT OF TRANSPORTATION

WASHINGTON, D.C. 20591

STATEMENT OF WITNESS

The purpose of this statement is intended solely for use in determining the facts, conditions and circumstances, and the probable cause of the subject accident.

Date Dec. 21, 1977I. Place of accident Anchor Point, Ak. Date Dec. 19, 1977 Hour 6:20 pm.II. Aircraft FH 1100 FAA Certificate No. _____III. What is your name Margaret Klein Age 38IV. Address Box 62 Anchor Point, Ak. 99556V. Occupation Secretary By whom employed Kenai Peninsula BoroughVI. Where were you at the time of the accident Mile 157 Sterling Hwy.

VII. Tell in your own words what you saw or heard before and at the time the accident occurred.

About 6:15-6:20 p.m. Monday nite I was driving down the highway toward Homer. I was about in front of the Anchor River Inn when I saw a white light coming from the sky about 1 mile down the road. After a little bit he turned off the light and I could see the blue aircraft light so I knew it was a plane. I then drove to Bob Moore's house about a mile from Anchor Point and was in their driveway facing Anchor Point. It wasn't too long until I saw the blue light coming toward the car and about even with Griner's driveway the blue light turned sharply toward the bay - North West. I turned the car around and the aircraft was still heading toward the bay when it disappeared in the snow & fog. It was snowing very heavily & the vision was very poor. I knew when it turned it was a helicopter.

Margaret Klein

(Signature)

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

Flight Service Station
Homer, Alaska

December 22, 1977



At 0428 I heard N18845 declare "Mayday Mayday, Helicopter 845 6W Anchor Point". The transmission was very quick and the last portion was somewhat muffled and garbled but understandable. The aviation VHF radio in N18845 was generally not clear but with experience in listening to it, it was generally understandable.

The pilot's voice was not noticeably excitable, but the transmission was very quick and there was no further contact or signal from N18845. It was definitely not a panicky transmission, just quick.

James Holcomb
JAMES HOLCOMB JH
ATCS, Homer FSS

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

Flight Service Station
Homer, Alaska

December 23, 1977



I, Thomas M. O'Neill, while working Pos. B at Homer FSS, heard
"Mayday 845".

The transmission was quick and precise; although it did trail off
at the end. There was no sign of fright or panic in his voice and the
transmission came across loud and clear.

A handwritten signature in cursive script, reading "Thomas M. O'Neill", followed by a small flourish.

THOMAS M. O'NEILL TO
ATCS, Homer FSS



CHEMICAL & GEOLOGICAL LABORATORIES OF ALASKA, INC.

TELEPHONE (907) 279-4014

P.O. BOX 4-1276
ANCHORAGE, ALASKA 99509

4649 BUSINESS PARK BLVD.

ANALYTICAL REPORT

PRODUCT: JET B

TANK NUMBER: Fuel Tank that refueled FH-1100 N18845

DATE: December 26, 1977

OTHER: NTSB# Anc 78 FA005

P.O. NUMBER: _____

LAB NUMBER: 7063

General Characteristics

Parameter	Results	Jet A-50	Jet B	Av 80/87	Av 100/130	Other
Specific Gravity 60/60°F	<u>0.7655</u>	Report	Report	Report	Report	_____
A.P.I.°	<u>53.35</u>	39-51	45-57	Report	Report	_____
Color (Saybolt)	_____	+12	-----	-----	-----	_____
Flash, °F	_____	100-150	-----	-----	-----	_____
Freeze Point, °F	_____	Max -50	-----	-----	-----	_____
Reid Vapor Pressure, lbs	<u>2.4</u>	-----	Max 3	5.5-7.0	5.5-7.0	_____
WSIM	_____	Min 85	Min 70	-----	-----	_____
			X			_____

RESULTS:

☒ Meets specifications for product checked above.

☐ Does not meet specifications for product checked above and violation circled.

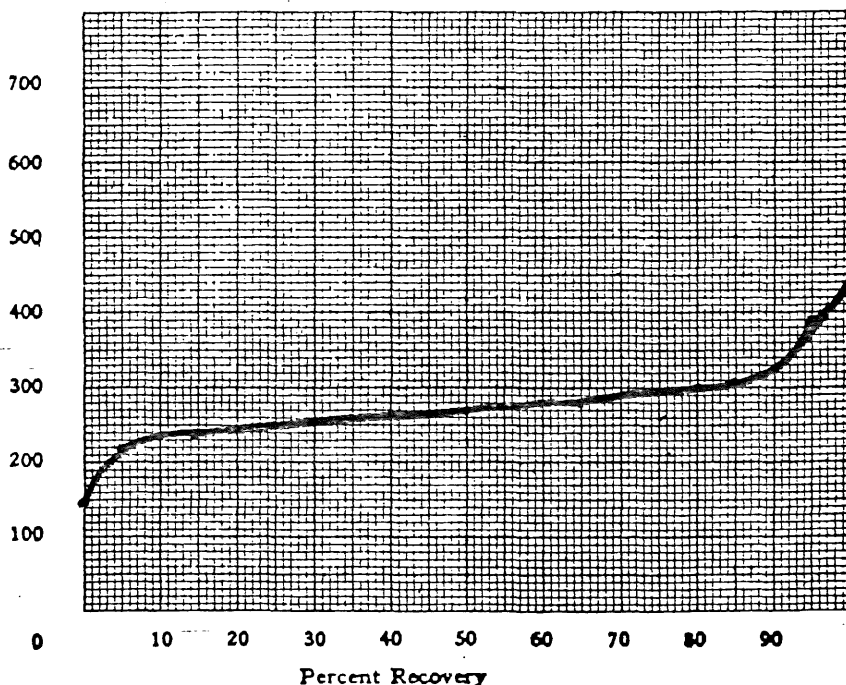
ENGLER DISTILLATION

DISTILLATION GRAPH

Jet A50 Jet B 80/87 100/130				OTHER
Recovery, %	rpt	rpt	rpt	Temperature, °F.
IBP	rpt	rpt	rpt	148
5	400	rpt	167	219
10			167	234
15				240
20			10+50% Min	246
25			307	250
30				254
35				258
40				264
45	450	370	221	266
50			221	270
55				274
60				278
65				282
70				288
75				294
80				300
85				310
90	500	470	275	275
95				336
				390
				452
E.P.				
550	rpt	338	338	
Recovery, %			98.0	
Residue, %			0	
Loss, %			2.0	

OTHER

Temperature, °F.



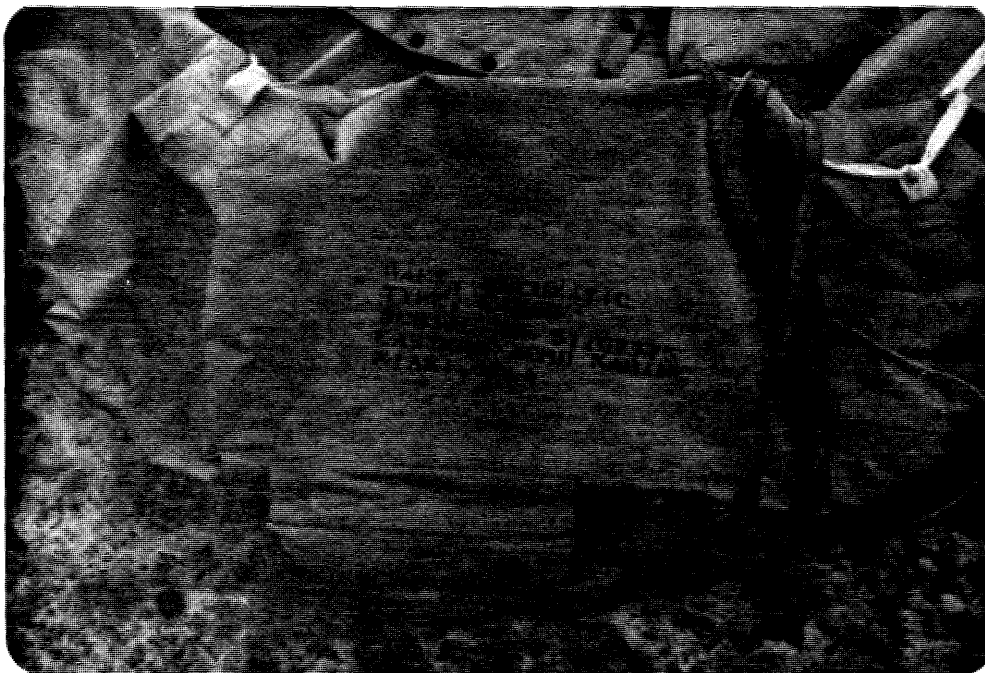
Jet A-50	Jet B	Av 80/87	Av 100/130	OTHER
---	---	---	---	---
1.5	---	1.5	1.5	---
1.5	---	1.5	1.5	---

DEPARTMENT OF TRANSPORTATION NATIONAL TRANSPORTATION SAFETY BOARD		Accident identification number
RELEASE OF AIRCRAFT WRECKAGE AND/OR PARTS		ANC78FA005
A.		
1. <input checked="" type="checkbox"/> Release of aircraft wreckage	2. <input type="checkbox"/> Receipt of material	
3. Registered owner or owner's authorized agent	4. Investigator in charge or engineering Div.	
Name ROSEMURGY & CO., INC.	Name JON L. OSGOOD	
Address 424 THIRD AVE. W.	Address 632 6TH AVE. RM. 454	
City and State SEATTLE, WA. 98119	City and State ANCHORAGE, AK. 99501	
5. Aircraft identification, date, and location of accident		
Registered owner TOTEM HELICOPTERS, INC. HOMER, AK.	Registration No. N 18845	
Make FAIRCHILD HILLER	Model FH-1100	
Date of accident 12 / 19 / 77	Location NEAR ANCHOR POINT, ALASKA	
6. National Transportation Safety Board <input type="checkbox"/> has, <input checked="" type="checkbox"/> has not completed its investigation of the aircraft wreckage described above.		
7. All wreckage except that listed below in box 11 is hereby released to the registered owner for appropriate disposition. (If no parts are retained, insert NONE.) NONE - Richard Ramsey		
8. NTSB representative's signature Jon L. Osgood JON L. OSGOOD	Title AIR SAFETY INVESTIGATOR	Date 12/29/77

25



- #1. This photo shows all that was recovered from Helicopter N-18845. The EAM-5 five man life raft was partially filled with water when found. When the right float was retrieved from Cook Inlet it was buckled and folded in the center. Several small pieces of plexiglass fell from the fold in the canvas when it was laid out on the deck of the U.S. Coast Guard Cutter Sedge. The metal float tube (left side of photo) was just barely attached to the end of the float as it was pulled from the water.



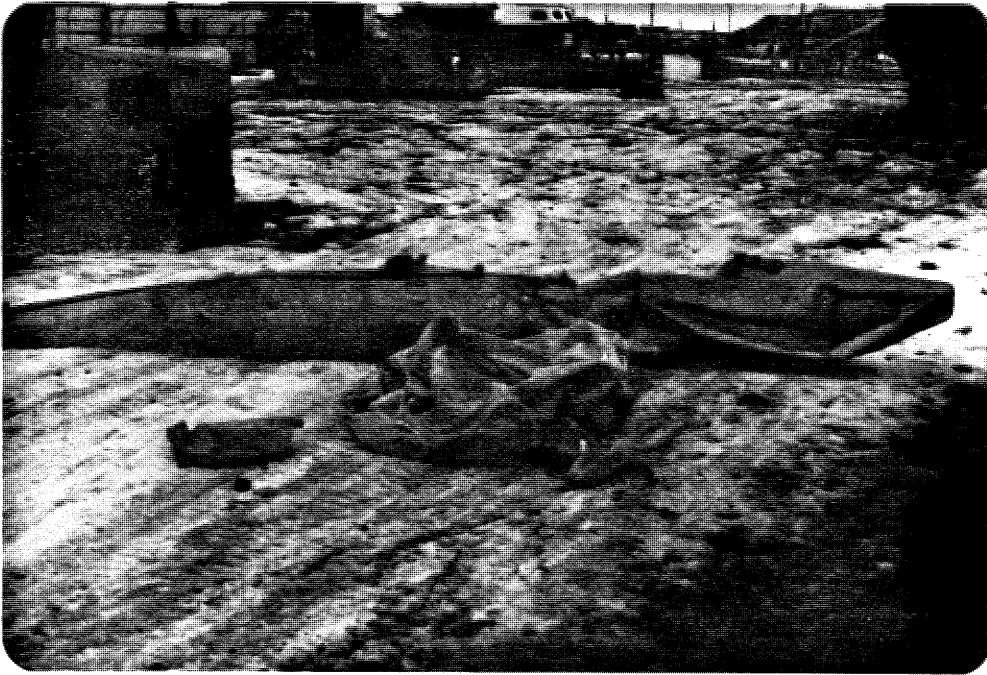
- #2. Closeup of identifying numbers on the emergency life raft. This serial number matches the number of the raft inspected by Eagle Enterprises, Inc., in Anchorage, Alaska, on 10-12-77, which was placed in N-18845.



#3. Photo showing inboard side of right float and metal float tube.



#4. Closeup of mid-section of inboard side of right float.



#5. View showing outboard side of right float.



#6. View showing where metal float tube is normally positioned inside of canvas sleeve running down the top of the float. Note where bend in tube and tear in canvas sleeve match up. This would indicate the helicopter impacted relatively nose high.